

REMARKS

The present Amendment amends claims 4-9 and adds new claims 10-21. Therefore, the present application has pending claims 4-21.

In the January 28, 2004 Office Action the Examiner rejected claims 4-9 under 35 USC §102(e) as being anticipated by Asano (U.S. Patent No. 5,987,339). This rejection is traversed for the following reasons. Applicants submit that the features of the present invention as now recited in claims 4-9 are not taught or suggested by Asano whether taken individually or in combination with any of the other references of record. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

Amendments were made to claims 4-9 so as to more clearly describe features of the present invention not taught or suggested by any of the references of record, particularly Asano, whether taken individually or in combination with any of the other references of record.

Specifically, amendments were made to claims 4-9 so as to more clearly recite that the present invention provides a mobile communication terminal for receiving a spread spectrum signal intermittently that includes at least a first timer started when the receiver of the terminal changes from a receiving state to a suspension state, a second timer started when the receiver changes from the suspension state to the receiving state, wherein an accuracy of the second timer is higher than that of the first timer and a chip rate of the spread spectrum signal, an intermittent receiving controller which controls the receiving state and the suspension state based on the count by the first timer and the second timer, and a calculator which calculates a timing error which occurred due to the first timer.

According to the present invention as now more clearly recited in the claims the intermittent receiving controller controls the demodulation unit so as to resume demodulation operation so that de-spreading the spread spectrum signal attains synchronization based on the timing error after the receiver changes from the suspension state to the receiving state.

Thus, as per the present invention the demodulation unit of the terminal is operable intermittently and a wakeup is provided to aid such intermittent operation and the terminal is capable of operation with the intermittently operated demodulation unit in a communication system which uses spread spectrum signals (e.g. CDMA).

Asano teaches in col. 7, lines 16-42 that a counter 5 counts pulses of a low-frequency clock signal and periodically generates a re-activation signal to the controller 6, which is described as including a digital signal processor (DSP), CPU, RAM, ROM, etc. Asano also teaches in col. 6, lines 44-51 that the transmission/reception processing unit 7 demodulates a received signal into a baseband signal and informs the controller 6 of the baseband signal. Thus, Asano merely teaches the changing of the controller 6, not the demodulator (transmission/reception processing unit 7), between a sleep mode and an awake mode.

Therefore, Asano fails to teach or suggest the features of the present invention of providing an intermittent receiving controller which controls the demodulation unit so as to resume demodulation operation so that de-spreading the spread spectrum signal attains synchronization based on the timing error after said receiver changes from said suspension state to the receiving state as now more

clearly recited in the claims. Thus, according to the present invention a wakeup is provided for the demodulation unit. No such teaching can be found in Asano.

Further, Asano fails to teach or suggest the features of the present invention of providing a second timer started when the receiver of the terminal changes from the suspension state to the receiving state, wherein an accuracy of the second timer is higher than that of the first timer and a chip rate of the spread spectrum signal as now more clearly recited in the claims. Thus, according to the present invention the terminal is capable of operation with the intermittently operated demodulation unit in a communication system which uses spread spectrum signals (e.g. CDMA). No such teaching can be found in Asano.

Based on the above, Applicants submit that the features of the present invention as now more clearly recited in claims 4-9 are not anticipated nor rendered obvious by Asano. Accordingly, reconsideration and withdrawal of the 35 USC §102(e) rejection of claims 4-9 is respectfully requested.

As indicated above the present Amendment adds new claims 10-21 which variously depend from claims 4-9. Therefore, the same arguments presented above with respect to claims 4-9 apply as well to new claims 10-21.

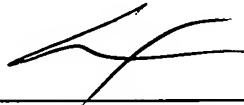
The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the reference utilized in the rejection of claims 4-9.

In view of the foregoing amendments and remarks, Applicants submit that claims 4-21 are in condition for allowance. Accordingly, early allowance of the present application based on claims 4-21 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (500.37060CX1).

Respectfully submitted,

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